

AMENDMENT TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application.

Claims 1-24 (Canceled)

25. (Currently Amended) A method of determining a risk of having or developing a clinical subtype of Crohn's disease characterized by fibrostenosis, internal perforating disease or the need for small bowel surgery in a subject having Crohn's disease, comprising obtaining a sample from the subject, and determining the presence or absence magnitude of three markers in the subject, said three markers being IgA anti-I2 antibodies, anti-Saccharomyces cerevisiae antibodies (ASCA), and IgA anti-OmpC antibodies, wherein the presence a high magnitude of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a first risk of having or developing said clinical subtype of Crohn's disease, the presence a high magnitude of exactly two of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a second risk of having or developing said clinical subtype of Crohn's disease, the presence a high magnitude of exactly one of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a third risk of having or developing said clinical subtype of Crohn's disease, and the absence of a high magnitude of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a fourth risk of having or developing said clinical subtype of Crohn's disease, wherein the magnitude of each of said one or more markers is determined by contacting the sample with an antigen or fragment thereof specifically reactive with each of said one or more markers, and assaying for the magnitude of each of said one or more markers by detecting specific binding of said antigen or fragment thereof, and wherein said first risk is greater than said second risk, said second risk is greater than said third risk, and said third risk is greater than said fourth risk.

26. (Currently Amended) A method of determining a risk of having or developing a clinical subtype of Crohn's disease characterized by the need for small bowel surgery in a subject having Crohn's disease, comprising obtaining a sample from the subject, and determining the magnitude ~~presence or absence~~ of three markers in the subject, said three markers being IgA anti-I2 antibodies, anti-Saccharomyces cerevisiae antibodies (ASCA), and IgA anti-OmpC antibodies, wherein a high magnitude ~~the presence~~ of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a first risk of having or developing said clinical subtype of Crohn's disease, a high magnitude ~~the presence~~ of exactly two of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a second risk of having or developing said clinical subtype of Crohn's disease, ~~the presence~~ a high magnitude of exactly one of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a third risk of having or developing said clinical subtype of Crohn's disease, and the absence of a high magnitude of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a fourth risk of having or developing said clinical subtype of Crohn's disease, wherein the magnitude of each of said one or more markers is determined by contacting the sample with an antigen or fragment thereof specifically reactive with each of said one or more markers, and assaying for the magnitude of each of said one or more markers by detecting specific binding of said antigen or fragment thereof, and wherein said first risk is greater than said second risk, said second risk is greater than said third risk, and said third risk is greater than said fourth risk.

Claims 27-28 (Canceled)

29. (Currently Amended) A method of determining a risk of having or developing a clinical subtype of Crohn's disease characterized by fibrostenosis, internal perforating disease or the need for small bowel surgery in a subject having Crohn's disease, comprising obtaining a sample from the subject, and determining the ~~presence and magnitude~~ of three markers in the subject, said three markers being IgA anti-I2 antibodies, anti-Saccharomyces cerevisiae antibodies (ASCA), and IgA anti-OmpC

antibodies, wherein the magnitude of each of said one or more markers is determined by contacting the sample with an antigen or fragment thereof specifically reactive with each of said one or more markers, and assaying for the magnitude of each of said one or more markers by detecting specific binding of said antigen or fragment thereof, wherein a greater magnitude of said three markers combined relative to levels found in individuals who do not have Crohn's disease indicates a greater risk of having or developing said clinical subtype characterized by fibrostenosis, internal perforating disease or the need for small bowel surgery.

30. (Previously Presented) The method according to claim 29, wherein the step of determining the magnitude of three markers in the subject further comprises a step of performing quartile analysis of the magnitude of each marker.

31. (Previously Presented) The method according to claim 30, wherein quartile analysis further comprises assigning scores based on the quartile into which a marker falls and then adding the scores to obtain a quartile sum score whereby a higher quartile sum score indicates a greater risk of having or developing said clinical subtype characterized by fibrostenosis, internal perforating disease or the need for small bowel surgery.

32. (New) A method of determining a risk of having or developing a clinical subtype of Crohn's disease characterized by fibrostenosis, internal perforating disease or the need for small bowel surgery in a subject having Crohn's disease, comprising obtaining a sample from the subject, and determining the magnitude of three markers in the sample in conjunction with one another, said three markers being IgA anti-I2 antibodies, anti-Saccharomyces cerevisiae antibodies (ASCA), and IgA anti-OmpC antibodies, wherein a high magnitude of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a first risk of having or developing said clinical subtype of Crohn's disease, a high magnitude of exactly two of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a second risk of having or developing said clinical subtype of Crohn's

disease, a high magnitude of exactly one of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a third risk of having or developing said clinical subtype of Crohn's disease, and a low magnitude of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a fourth risk of having or developing said clinical subtype of Crohn's disease, wherein the magnitude of each of said one or more markers is determined by contacting the sample with an antigen or fragment thereof specifically reactive with each of said one or more markers, and assaying for the magnitude of each of said one or more markers by detecting specific binding of said antigen or fragment thereof, and wherein said first risk is greater than said second risk, said second risk is greater than said third risk, and said third risk is greater than said fourth risk.

33. (New) A method of determining a risk of having or developing a clinical subtype of Crohn's disease characterized by the need for small bowel surgery in a subject having Crohn's disease, comprising obtaining a sample from the subject, and determining the magnitude of three markers in the sample in conjunction with one another, said three markers being IgA anti-I2 antibodies, anti-Saccharomyces cerevisiae antibodies (ASCA), and IgA anti-OmpC antibodies, wherein a high magnitude of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a first risk of having or developing said clinical subtype of Crohn's disease, a high magnitude of exactly two of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a second risk of having or developing said clinical subtype of Crohn's disease, a high magnitude of exactly one of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a third risk of having or developing said clinical subtype of Crohn's disease, and a low magnitude of said three markers relative to levels found in individuals who do not have Crohn's disease indicates a fourth risk of having or developing said clinical subtype of Crohn's disease, wherein the magnitude of each of said one or more markers is determined by contacting the sample with an antigen or fragment thereof specifically reactive with each of said one or more markers, and assaying for the magnitude of each of said one or more markers by detecting specific

binding of said antigen or fragment thereof, and wherein said first risk is greater than said second risk, said second risk is greater than said third risk, and said third risk is greater than said fourth risk.

34. (New) A method of determining a risk of having or developing a clinical subtype of Crohn's disease characterized by fibrostenosis, internal perforating disease or the need for small bowel surgery in a subject having Crohn's disease, comprising obtaining a sample from the subject, and determining the magnitude of three markers in the sample in conjunction with one another, said three markers being IgA anti-I2 antibodies, anti-Saccharomyces cerevisiae antibodies (ASCA), and IgA anti-OmpC antibodies, wherein the magnitude of each of said one or more markers is determined by contacting the sample with an antigen or fragment thereof specifically reactive with each of said one or more markers, and assaying for the magnitude of each of said one or more markers by detecting specific binding of said antigen or fragment thereof, wherein a greater magnitude of said three markers combined relative to levels found in individuals who do not have Crohn's disease indicates a greater risk of having or developing said clinical subtype characterized by fibrostenosis, internal perforating disease or the need for small bowel surgery.

35. (New) The method according to claim 34, wherein the step of determining the magnitude of three markers in the sample further comprises a step of performing quartile analysis of the magnitude of each marker.

36. (New) The method according to claim 35, wherein quartile analysis further comprises assigning scores based on the quartile into which a marker falls and then adding the scores to obtain a quartile sum score whereby a higher quartile sum score indicates a greater risk of having or developing said clinical subtype characterized by fibrostenosis, internal perforating disease or the need for small bowel surgery.